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AUTHOR Fullerton, Howard N., Jr.: Flaim, Paul O.

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#### ABSTRACT

Prepared as part of the Bureau of Labor Statistics periodic reassessment of its projections of the future growth trends of the various sectors of the American economy, new labor force projections to 1990 are presented based on trends in labor force participation as observed through 1975 and on the most recent population projections of the U.S. Census Bureau. Major points of emphasis are the following: (1) The U.S. work force, which has been growing at unprecedented rates since World War II, is expected to grow more slowly during the next 15 years. (2) Projections developed by the Bureau of Labor Statistics (BLS) show that the labor force should grow at an annual rate of 1.9% in the latter half of the 1970's and only 1.1% a year during the 1980's, compared with a rate of increase of 2.3% during the first half of the 1970's. (3) Behind this slowdown is a sharp drop in the birth rate of the 1960's, which means there will be fewer youths reaching working age in the 1980's. The authors discuss specific 1975-1990 labor force participation projections of women, men, youth (16-24), prime age individuals (25-54), and clder age persons (55 and over); compare present with earlier BLS projections published in 1973; explain methods of driving projections and underlying assumptions; and suggest alternative projections based on two different fertility assumptions. A supplementary table is appended which shows noninstitutional population, total labor force, and labor force participation rates by age and sex, actual for 1970 and 1975 and projected for 1980, 1985, and 1990. (BM)

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## New Labor Force Projections to 1990



Special Labor Force Report 197

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Weekly and Hourly Earnings data from the Current Population Survey

# New labor force projections to 1990

Special Labor Force Report indicates the work force will grow more slowly from 1975 to 1990 than in recent years, largely because there will be a smaller number of youths reaching working age

HOWARD N FULLERTON, JR., AND PAUL O. FLAIM

The U.S. work force, which has been growing at unprecedented rates since World War II, is expected to grow more slowly during the next 15 years. Projections developed by the Bureau of Labor Statistics show that the labor force should grow at an annual rate of 1.9 percent in the latter half of the 1970's, and only 1.1 percent a year during the 1980's, compared with a rate of increase of 2.3 percent during the first half of the 1970's. Behind this slowdown is a sharp drop in the birth rate of the 1960's, which means there will be fewer youths reaching working age in the 1980's.

In absolute terms, the civilian labor force is estimated to expand by 9.1 million in the latter half of the 1970's, reaching 101.7 million by 1980. This increase will complete the absorption into the labor force of persons born during the postwar "baby boom." The labor force is projected to rise to 108.6 million in 1985, and to 113.8 million in 1990.

Labor force participation among women has been increasing rapidly for many years, and this in-

Howard N Fullerton, Jr., is a labor economist in the Division of Labor Force Studies, Bureau of Labor Statistics, and Paul O. Flaim is Division Chief. Paul M. Ryscavage, an economist in the Division, contributed significantly to the preparation of this article. An earlier version of the article was presented at the annual meeting of the American Statistical Association held in Boston in August 1976.

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With supplementary table

crease is projected to continue, although at a lower rate, through 1990 (tables 1 and 2). The number of women in the labor force, 37.0 million in 1975, is projected to rise by 11.6 million by 1990, an increase of 1.8 percent per year. This represents a slightly slower rate of growth than experienced over the early 1970's, when the female labor force grew 3.2 percent a year. The main factor behind the projected slowdown is a drop after 1980 in the number of women in the ages at which people enter the labor force.

#### Updating of projections

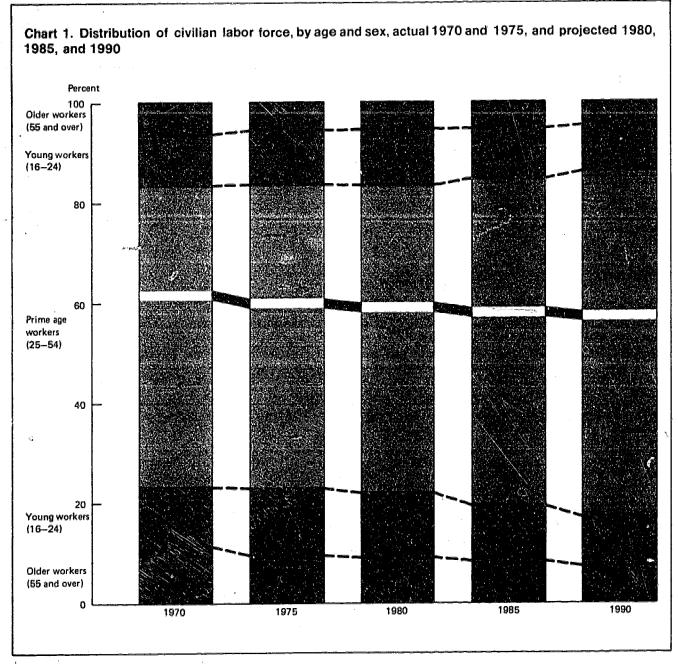
These new labor force projections were prepared as part of the Bureau of Labor Statistics' periodic reassessment of its projections of the future growth trends of the various sectors of the American economy. The estimates are based on the trends in labor force participation as observed through 1975 and on the most recent projections of the population, which were published by the Bureau of the Census in 1975. (See Current Population Reports, Series P-25, No. 601.) These labor force projections are somewhat higher than those published in 1973.

The projections in this article differ slightly from the projections underlying the articles by Thomas J. Mooney and John H. Tschetter and by Max L. Carey which appeared in the November 1976 issue of the Monthly Labor Review.

U.S. DEPARTMENT OF LABOR
Bureau of Labor Statistics







Although the labor force participation rate of men is expected to continue its gradual historical decline over the same period, the number of men in the civilian labor force, at 55.6 million in 1975, is still expected to grow by 9.6 million between 1975 and 1990, or by 1.1 percent a year (table 1 and chart 1). Despite the slower rate of growth for men than for women, men are still expected to comprise 57 percent of the labor force in 1990.

In terms of its age composition, civilian labor force growth between 1975 and 1990 will be heavily concentrated in the central age groups. The following tabulation shows the number of persons (in

thousands) actually in the labor force in 1975 and projected to 1990. As shown, the number of persons age 16-24 in the labor force is actually expected to decline in size by 1990, and the older labor force (age 55 and over) is projected to be only slightly higher in 1990 than in 1975.

<del>-</del>	Actual	Projected						
Age group	1975	1980	1985	1990				
16-24 years	22,266	24,266	23,067	20,952				
25-54 years	56,182	62,497	70,616	78,567				
55 years and over	14,165	14,910	14,919	14,320				

These labor force projections were made essen-

Table 1. Civilian noninstitutional population, labor force, and labor force participation rate by age and sex, actual 1970 and 1975, and projected 1980, 1985, and 1990

[Numbers in thousands]

aeri Z	Ctvillan noninstitutional population, July 1					Civilian labor force, annual averages					Civilian labor force participation rates, annual averages (percent of population in labor force)				
Sex and age group	Act	Actual Pr				Act	huai		Projected		Act	val		Projected	
	1970	1975	1980	1985	1990	1970	1975	1980	1985	1990	1970	1975	1980	1985	1990
BOTH SEXES															
Total, 16 years and over	137,809 30,159 70,085 37,563	151,389 34,530 75,983 40,876	163,200 36,108 82,953 44,139	171,900 33,389 91,942 46,569	178,967 30,078 101,138 47,751	82,714 17,829 50,388 14,497	92,613 22,265 56,182 14,165	101,673 24,266 62,497 14,910	108,602 23,067 70,616 14,919	113,839 20,952 78,567 14,320	60.0 59.1 71.9 38.6	61.2 64.5 73.9 34.7	62,3 67,2 75,3 33,8	63.2 69.1 76.8 32.0	63.6 69.7 77.7 30.0
MEN		,							ĺ						
Total, 16 years and over. 16 to 19 years. 16 and 17 years 18 and 19 years. 20 to 24 years. 25 to 34 years. 35 to 44 years. 45 to 54 years. 55 to 54 years. 65 to 69 years 65 years and over 65 to 69 years 70 years and over	64,536 7,281 3,878 3,402 6,897 11,707 10,831 11,062 8,708 4,718 3,990 8,047 3,061 4,986	71,468 8,049 4,199 3,850 8,769 14,566 10,745 11,330 9,221 4,963 4,258 8,784 3,497 5,287	77,089 8,037 4,074 3,963 9,584 17,196 12,147 10,841 9,791 5,313 4,478 9,492 3,734 5,759	81,119 6,870 3,503 3,367 9,386 18,997 14,917 10,721 10,000 5,194 4,806 10,228 3,942 6,286	84,379 6,485 3,173 3,312 8,129 19,590 17,471 12,085 9,592 4,888 4,704 11,027 4,236 6,791	51,194 4,005 1,808 2,197 5,709 11,311 10,464 10,417 7,124 4,218 2,906 2,164 1,278 886	55.615 4,760 2,039 2,721 7,398 13,854 10,426 6,982 4,185 2,797 1,906 1,108 799	60,000 4,905 2,061 2,849 8,069 16,369 11,600 9,892 7,275 4,448 2,827 1,890 1,125 765	62,903 4,181 1,777 2,404 7,795 18,021 14,192 9,709 7,162 4,283 2,879 1,843 1,104 739	65,220 3,976 1,612 2,364 6,671 18,545 16,571 10,901 6,704 3,990 2,714 1,852 1,125 727	79.3 55.0 46.6 64.6 82.8 96.5 94.2 81.8 89.4 72.8 17.8	77.8 59.1 48.6 70.7 84.4 95.1 95.7 92.0 75.7 84.3 65.7 21.7 31.7	77.8 61.0 50.6 71.8 84.2 95.2 95.5 91.2 74.3 83.7 63.1 19.9 30.1 13.3	77.5 60.9 50.7 71.4 83.0 94.9 95.1 90.6 71.6 82.5 59.9 18.0 28.0 11.8	77.3 61.3 50.8 71.4 82.1 94.7 94.8 90.2 69.9 81.6 57.7 16.8 26.6
WOME'															
Total, 16 years and over. 16 to 19 years. 16 and 17 years 18 and 19 years 20 to 24 years. 25 to 34 years. 35 to 44 years. 45 to 54 years. 55 to 64 years. 55 to 59 years 60 to 64 years. 65 years and over. 65 to 69 years	73,273 7,485 3,796 3,689 8,494 12,724 11,771 11,986 9,757 5,181 4,576 11,051 3,817 7,236	79,921 8,225 4,113 4,111 9,486 15,514 11,618 12,206 10,349 5,470 4,878 12,521 4,433 8,088	86.111 8,160 3,972 4,188 10,327 18,108 13,084 11,577 11,035 5,881 5,154 13,820 4,748 9,072	90,781 7,018 3,420 3,598 10,115 19,967 15,903 11,437 11,238 5,698 5,549 15,1028 10,075	94,588 6,612 3,089 3,523 8,852 20,582 18,525 12,885 10,671 5,299 5,372 16,461 5,419	31,520 3,241 1,324 1,917 4,874 5,698 5,967 6,531 4,153 2,547 1,056 1,056 644 412	36,998 4,038 1,652 2,387 6,069 8,456 6,493 6,665 4,244 2,618 1,626 1,033 640 392	41,673 4,226 1,712 2,514 7,066 10,394 7,633 6,609 4,628 2,891 1,737 1,117 692 425	45,699 3,762 1,551 2,221 7,329 12,210 9,723 6,761 4,740 2,870 1,870 1,174 721 453	48,619 3,649 1,448 2,201 6,656 13,077 11,678 7,795 4,514 2,703 1,811 1,250 768	43.0 43.3 34.9 52.0 57.4 44.8 50.7 54.4 42.5 49.2 35.1 9.6 16.9	46.3 49.1 40.2 58.1 64.0 54.5 55.9 54.6 41.0 47.9 33.3 8.2 14.4	48.4 51.8 43.1 60.0 68.4 57.4 58.3 57.1 41.9 49.2 33.7 8.1	50.3 53.6 45.4 61.5 72.5 61.2 61.1 59.1 42.2 50.4 33.7 7.8 14.3	51.4 552.2 46.9 62.5 75.2 63.5 63.0 42.3 51.0 33.7 7.6 14.4

SOURCE: The 1970 and 1975 population are estimated from Current Population Reports, Series P.25, No. 614. Labor Force data for 1970 are from Special Labor Force Report 156.

The 1975 labor force data are from Current Population Survey estimates. Population projections are from Current Population Reports, Series P-25, No. 601.

tially by extrapolating the observed trends in the labor force participation rates (percent of population in the labor force) of the various groups of working age and by then applying the results to the Bureau of the Census' projected population levels for these groups. These population estimates are not subject to much uncertainty, because they deal with persons who have already been born and who, by and large, can be counted. There is, however, a much greater element of uncertainty with regard to the future course of the labor force participation rates of the different population groups.

#### Changes in the youth labor force

As noted earlier, the principal reason for the projected slowdown in labor force growth during the 1980's is the sharp drop in the birth rate during the 1960's, which will result in a smaller number of youths reaching labor force age than in recent

years. In fact, the youth labor force (age 16 to 24) is already growing at a slower pace. From 22.3 million in 1975, it is projected to increase by 2.0 million to 1980, a much smaller change than the 4.4-million advance between 1970 and 1975 (table 2). After 1980, the youth labor force is actually expected to decline, dropping by 1.2 million by 1985 and by a further 2.1 million, to 20.9 million, by 1990. The shrinking of the youth labor force will occur first among teenagers and then among youths age 20 to 24.

Growth of the teenage labor force is actually projected to level off by 1980, after increasing only slightly, by about 330,000, from its 1975 level. Over the 1980's, however, the number of teenagers in the labor force is expected to decrease by 1.5 million, reflecting the sharp drop in the teenage population. Because of this population decline, by 1990, teenagers will represent only 6.7 percent of the labor



Sex and age group		Net ch (in thou			Annual average rate of change 1 (in percent)				
· · · · · · · · · · · · · · · · · · ·	1970-75	1975-80	1990-85	1985-90	1970-75	1975-80	1980-85	1965-0	
BOTH SEXES					f				
Total, 16 years and over 5 to 24 years 16 to 19 years 20 to 24 years 5 to 54 years 25 to 34 years 35 to 44 years 45 to 54 years 55 to 56 years 45 to 54 years 55 to 64 years	9,899 4,436 1,552 2,884 5,795 5,301 350 143 - 332 - 51 - 281	9,060 2,001 333 1,695 6,315 4,453 2,452 -590 745 677 68	6,929 -1,199 -1,188 -38 8,119 3,468 4,682 -31 9 -1	5,237 -2,115 -318 -1,797 7,951 1,391 4,334 2,226 -599 -684 85	2.26 4.44 3.88 4.82 2.18 5.43 0.42 0.17 -0.46 -0.09 -1.83	1.87 1.72 .74 2.37 2.13 3.64 2.73 70 1.03 1.17 .46	1.32 -1.01 -2.79 (²) 2.44 2.44 4.36 (²) (²) (²)	0.9 -1.9 -2.5 2.1 -3.3 2.5 -1.1 0.5	
_ MEN									
Total, 16 years and over	4,421 2,444 755 1,689 2,376 -400 -142 -258	4,385 816 145 698 3,293 277 293 -16	2,903 - 998 - 724 - 301 4,061 - 160 - 113 - 47	2,317 -1,329 -205 -1,124 4,095 -449 -458	1.66 4.49 3.45 5.18 1.42 88 40 -2.54	1.52 1.30 .60 1.80 1.82 .61 .82 17	0.94 -1.60 -3.19 76 2.04 -0.35 31 50	0.7 -2.3 -1.0 -3.1 1.8 -1.0 -1.3	
WOMEN									
Tobal, 16 years and over 5 to 24 years 16 to 19 years 20 to 24 years 5 to 54 years 5 years and over 55 to 64 years 65 years and over	5,478 1,992 797 1,195 3,418 68 91 –23	4,675 1,185 188 997 3,022 468 384 84	4,026 201 464 263 4,058 169 112 57	2,920 -786 -113 -673 3,856 -150 -226	3,20 4,39 4,40 4,39 3,44 ,26 ,43 –,44	2.38 2.22 0.91 3.04 2.62 1.70 1.73 1.56	1.84 36 -2.33 .73 3.05 .58 0.48 1.00	1.2 -1.4 5 -1.9 2.5 5 5	

force, a significantly smaller proportion than the 9.5 percent which they accounted for in 1975.

With large numbers of the present teenage cohorts reaching adulthood over the next few years, the labor force group age 20 to 24 should grow very rapidly until the early 1980's, at which point it, too, will begin to decline. The number of women age 20 to 24 in the labor force is projected to have the greatest growth between 1975 and 1980, increasing by about 1.0 million. It should grow a further quarter of a million during the first half of the 1980 decade, but will then recede rapidly, dropping by nearly 700,000 by 1990. The number of men age 20 to 24 years in the labor force should increase by about 700,000 during the late 1970's. It is then expected to decrease by 300,000 during the early 1980's, and by more than I million during the 1985-90 period.

The completion of the entry of the "baby boom" generation into the labor force over the next few years will make the overall work force younger. For example, the median age of the labor force, which already decreased from 39.6 years in 1970 to 36.0 years in 1975, is projected to drop even further—to 34.9 years by 1980. Although the number of youths in the labor force will shrink after 1980, the median

age of the labor force should increase only slightly during the decade, to about 36.5 years in 1990 (table 3). This is because the baby boom cohorts will still be relatively young; the bulk of them will still be in their thirties in 1990.1

#### The prime age labor force

The prime age labor force—composed of persons age 25 to 54—should grow much more rapidly than the other two groups over the next 15 years. It is projected to expand at an annual rate of 2.1 percent during the late 1970's, 2.4 percent in the early 1980's, and 2.1 percent thereafter. The principal factor behind this projected increase is that by 1990, all persons born in the period following World War II will be in the prime ages. A second factor is the expected continuation of the rising trend in the labor force participation of women. As a result, the proportion of the labor force accounted for by prime age workers is expected to increase from 61 percent in 1975 to 65 percent in 1985, and to about 70 percent in 1990.

As this labor force group grows, both in absolute and relative terms, the economy should have the potential for increased productivity. Also, with a much larger proportion of the work force in ages in which the probability of unemployment is lowest, the Nation's unemployment rate should tend to be somewhat lower than in recent years, other things being equal.<sup>2</sup>

Furthermore, the capacity of the labor force to carry out social responsibilities should be enhanced during this period. One way of illustrating this strength is to examine the projected changes in the ratio of nonworkers to workers, generally referred to as the "economic dependency" ratio:3

1975 1980 1985 1990

Dependency ratio ............... 125.4 114.7 111.5 111.4

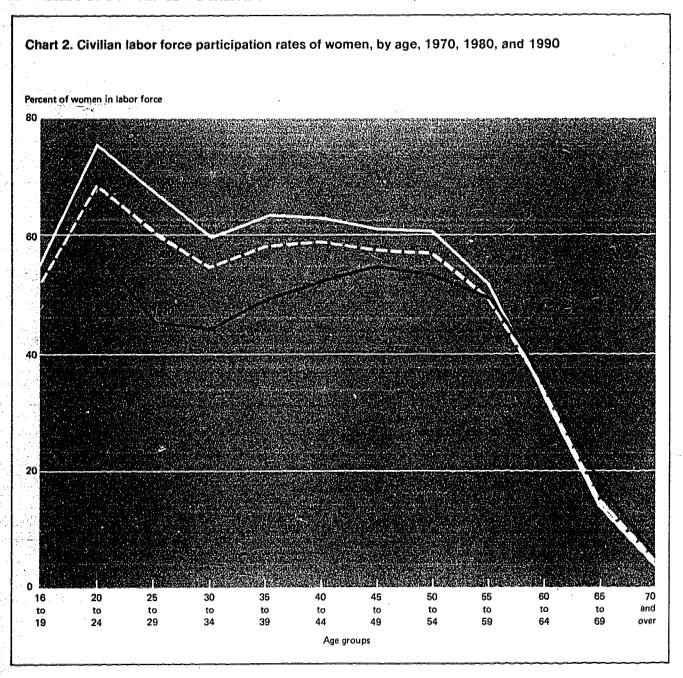
As shown, the average number of nonworkers for each 100 labor force members is projected to drop from about 125 in 1975 to 111 in 1990. This decline reflects essentially the absorption of the baby boom cohorts into the labor force. (Of course, as the baby boom cohorts begin to retire in large numbers during the late 1990's and early in the next century, the pendulum will begin to swing in the other direction.)

As shown both in tables 1 and 2, the projected growth of the prime age labor force between 1975 and 1990 will also be a reflection of the aging of

persons born during the post-World War II baby boom. The projected growth of 6.3 million in the latter 1970's will occur mainly among persons 25 to 34 year old, and the 8.1 million growth of the early 1980's should be concentrated among 35- to 44-year-olds. This latter age group should also exhibit the most growth in the late 1980's. To the economy as a whole, the increase in the labor force of these age groups is highly favorable. However, because of the "crowding" of workers in these central age groups, the individual members of these groups are likely to encounter more competition for certain jobs, such as management positions, the number of which is generally related to the number of workers of all ages.4

Another important factor contributing to the growth of the labor force among workers of prime working age is the increased participation by women, particularly those of childbearing age. Historically, participation rates for women at the primary childbearing ages have been significantly lower than both those of younger and of somewhat older women. However, this difference, particularly in relation to older women, has been getting smaller and smaller. (See chart 2.) While the rising trend in

Sex and age group  BOTH SEXES  Total, 16 years and over	82,714 17,829 7,246 10,588 17,009 16,431 16,948 14,497 11,277	92.613 22.265 8,798 13.467 56,182 22,310 16,781 17,091 14,165 11,226	1960 101,673 24,266 9,131 15,162 62,497 25,763 19,233 19,530 14,910	1985 108,602 23,067 7,943 15,124 70,616 30,231 23,915 16,470 14,919	1990 113,839 20,952 7,625 13,327 78,567 31,622 28,249 18,696	1970 100.0 21.6 8.8 12.8 60.9 20.6 19.9 20.5	1975 100.0 24.0 9.5 14.5 60.7 24.1 18.1	1900 100.0 23.9 9.0 14.9 61.5 26.3	1985 100.0 21.2 7.3 13.9 65.0 27.8	1990 100, 18, 6, 11, 69, 27,
Total, 16 years and over. to 24 years. 16 to 19 years. 20 to 24 years. 25 to 34 years. 25 to 34 years. 35 to 44 years. 45 to 54 years. 55 to 64 years.	82,714 17,829 7,246 10,583 50,388 17,009 16,431 16,948 14,497	92.613 22.265 8,798 13,467 56,182 22,310 16,781 17,091 14,165	101,673 24,266 9,131 15,162 62,497 25,763 19,233 16,501 14,910	108,602 23,067 7,943 15,124 70,616 30,231 23,915 16,470	113,839 20,952 7,625 13,327 78,567 31,622 28,249 18,696	100.0 21.6 8.8 12.8 60.9 20.6 19.9	100.0 24.0 9.5 14.5 60.7 24.1 18.1	100.0 23.9 9.0 14.9 61.5 26.3	100.0 21.2 7.3 13.9 65.0	100, 18, 6, 11, 69,
Total, 16 years and over. to 24 years. 16 to 19 years. 20 to 24 years. 25 to 34 years. 25 to 34 years. 35 to 44 years. 45 to 54 years. 55 to 64 years.	17,829 -7,246 10,583 50,388 17,009 16,431 16,948 14,497 11,277	22.265 8,798 13,467 56,182 22,310 16,781 17,091 14,165	24,266 9,131 15,162 62,497 25,763 19,233 16,501 14,910	23,067 7,943 15,124 70,616 30,231 23,915 16,470	20,952 7,625 13,327 78,567 31,622 28,249 18,696	21.6 8.8 12.8 60.9 20.6 19.9	24.0 9.5 14.5 60.7 24.1 18.1	23.9 9.0 14.9 61.5 26.3	21.2 7.3 13.9 65.0	18 6 11 69
to 24 years, 16 to 19 years 20 to 24 years, to 54 years, 25 to 34 years, 35 to 44 years, 45 to 54 years, 45 to 54 years, 55 to 54 years,	17,829 -7,246 10,583 50,388 17,009 16,431 16,948 14,497 11,277	22.265 8,798 13,467 56,182 22,310 16,781 17,091 14,165	24,266 9,131 15,162 62,497 25,763 19,233 16,501 14,910	23,067 7,943 15,124 70,616 30,231 23,915 16,470	20,952 7,625 13,327 78,567 31,622 28,249 18,696	21.6 8.8 12.8 60.9 20.6 19.9	24.0 9.5 14.5 60.7 24.1 18.1	23.9 9.0 14.9 61.5 26.3	21.2 7.3 13.9 65.0	18 6 11 69
16 to 19 years	7,246 10,583 50,388 17,009 16,431 16,948 14,497 11,277	8,798 13,467 56,182 22,310 16,781 17,091 14,165	9,131 15,162 62,497 25,763 19,233 16,501 14,910	7,943 15,124 70,616 30,231 23,915 16,470	7,625 13,327 78,567 31,622 28,249 18,696	8.8 12.8 60.9 20.6 19.9	9.5 14.5 60.7 24.1 18.1	9.0 14.9 61.5 26.3	7.3 13.9 65.0	11 69
20 to 24 years. 0 \$4 years. 25 to 34 years. 35 to 44 years. 45 to 54 years. 45 to 54 years. 55 to 64 years.	10,583 50,388 17,009 16,431 16,948 14,497 11,277	13,467 56,182 22,310 16,781 17,091 14,165	15,162 62,497 25,763 19,233 16,501 14,910	15,124 70,616 30,231 23,915 16,470	13,327 78,567 31,622 28,249 18,696	12.8 60.9 20.6 19.9	14.5 60.7 24.1 18.1	14.9 61.5 26.3	13.9 65.0	11 69
to 54 years, 25 to 34 years	50,388 17,009 16,431 16,948 14,497 11,277	56,182 22,310 16,781 17,091 14,165	62,497 25,763 19,233 16,501 14,910	70,616 30,231 23,915 16,470	78,567 31,622 28,249 18,696	60.9 20.6 19.9	60,7 24.1 18.1	61.5 26.3	65.0	69
25 to 34 years	17,009 16,431 16,948 14,497 11,277	22,310 16,781 17,091 14,165	25,763 19,233 16,501 14,910	30,231 23,915 16,470	31,622 28,249 18,696	20,6 19,9	24.1 18.1	26.3		
35 to 44 years	16,431 16,948 14,497 11,277	16,781 17,091 14,165	19,233 16,501 14,910	23,915 16,470	28,249 18,696	19.9	18,1			1 21
45 to 54 years	16,948 14,497 11,277	17,091 14,165	16,501 14,910	16,470	18,696			18.9	22.0	24
ears and over 55 to 64 years	14,497 11,277	14,165	14,910				18,5	16.2	15.2	16
55 to 64 years	11,277				14.320	17.5	15.3	14.7	13.7	12
			11.903	11,902	11.218	13.6	12.1	11.7	11.0	9
	3,220	2,939	3,007	3,017	3.102	3.9	3.2	3.0	2.8	2
in 38*	39.6	36.0	34.9	35.3	36.5	*******		,	******	*****
MEN					,					
Total, 16 years and over	51,194	55,615	60,000	62,903	65,220	61.9	60,1	59.0	57.9	57
o 24 years	9,714	12,158	12,974	11,976	10,647	11.7	13.1	12.8	11.0	9
16 to 19 years	4,005	4,760	4,905	4,181	3,976	4,8	5.1	4.8	3.8 7.2	3
20 to 24 years	5,709	7,398	8,069	7,795	6,671	6.9	8.0 37.3	8.0 37.2	38.6	40
o 54 years	32,192	34,568	37,861	41,922	46,017	38.9 11.2	37.3 9.6	9.0	8.3	7
ignis and wer	9,288	8,888	9,165	9,005	8,556 6,704	8.6	7.5	7.2	6.6	Í
55 to 64 years	7,124	6.982	7,275 1,890	7,162 1,843	1.852	2.6	2.1	1.9	1.7	Ιí
.65 years and over	2,164 39.6	1,906 36.7	35.5	35.9	36.9	2.0	2.,	1.3	***	
ian age	39.0	30.7	33.5	33.3	30.9	********	******	*******	*******	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			41.675	45 600	40.610	20.	39.9	41.0	42.1	42
Total, 16 years and over	31,520	36,998	41,673	45,699 11.091	48,619 10,305	38,1 9,8	10.9	11.1	10.2	1 79
0.24 years	8,115 3,241	10,107 4,038	11,292 4,226	3,762	3.649	3.9	4.4	4.2	3.5	3
16 to 19 years	4,874	6,069	7.066	7,329	6,656	5.9	6.6	6.9	6.7	5
20 to 24 years	18,196	21,614	24.636	28,694	32,550	22.0	23.3	24.2	26.4	28
0 54 years,	5,209	5.277	5.745	5,914	5.764	6.3	5.7	5.7	5.4	1 5
ears and over	4,153	4,244	4.628	4.740	4.514	5.0	4.6	4.6	4.4	4



participation among women in the most active years of childbearing is attributable partly to the fact that many have either postponed the start of a family or have decided not to have children, it is also evident among those who are mothers of very young children, a group which remains large.<sup>5</sup>

Although the growth of the prime-age female labor force is not projected to be as great in the late 1970's as it was during the early part of this decade, it is expected to increase again during the early 1980's, when most of the baby boom cohorts will

enter this age group. Altogether, the number of prime age women in the labor force is projected to rise from 21.6 million in 1975 to 32.5 million in 1990, with their proportion of the labor force increasing from 23 to 29 percent (table 3). This represents a 2.7-percent annual average rate of increase over the 1975-90 period. Despite the fact that women in prime working years make up a smaller proportion of the labor force than do prime age men, they should account for roughly half of the total labor force growth during the next 15 years.



#### The older labor force

In general, the number of older workers—those 55 years and over—is projected to rise somewhat in the late 1970's, remain unchanged over the early 1980's, and then decline during the late 1980's. The participation rates of men in these age groups have been declining for some time. For example, the rate of men age 55 to 64 fell from 82 to 76 percent between 1970 and 1975, and it is projected to drop to about 70 percent by 1990.6 Rates for men 65 and over are also expected to continue their longrun decrease. However, the number of men in the labor force is still expected to increase somewhat during the late 1970's because of the continued growth of their population. During the early 1980's, there should be little change, with decreases in the number of older men in the labor force offset by increases in the number of older women, whose participation rates are expected to show little change. In the late 1980's, the number of persons age 55 and over in the labor force is projected to fall, and the 1990 level of 14.3 million should be only slightly higher than the 1975 average for this group. This is probably a short-term phenomenon which is related to a decrease in the population age 55-64, stemming from a drop in the birth rate during the great Depression of the 1930's. These population groups are expected to increase again in number after 1995.7

Overall, the proportion of the labor force accounted for by persons ages 55 and over should decline from 15 percent in 1975 to 13 percent in 1990.

The decrease in the proportion of older workers in the labor force has several implications which are difficult to quantify. On one hand, older workers bring to the workplace experience that cannot always be obtained in school. On the other hand, the older work force has a lower proportion of highly educated workers; thus, their withdrawal will increase the educational attainment of the work force. It is, therefore, difficult to assess the impact of a smaller proportion of older workers on the productivity of the labor force. One probable effect will be to enhance promotion opportunities for younger members of the labor force; indeed, some of the current pressure for earlier retirement may be caused by the competition by younger workers for higher level jobs.

#### Comparison with earlier projections

In general, the present labor force projections differ significantly from those BLS published in 1973. The difference is mostly in terms of the participation rates for women, which are now expected to rise considerably more than previously projected. As a consequence, the number of women in the labor force in 1980 is expected to be 2.5 million higher than previously projected. And for 1990, the current projections for women are 5.0 million higher than those published in 1973 (table 4).

The projection for women is higher for two reasons: First, the rise in female labor force participation has intensified since the last projection was made, and thus the extrapolation yields a higher

4,040 1,391 3,267

(in thousands)												
	Clyffian labor force 16 years old and over, by age and sex											
		1960			1965		1990					
Sex and age group	Current projection (1)	1973 projection (2)	Difference (1) - (2) (3)	Current projection (4)	1973 projection (5)	Ofference (4) - (5) (6)	Current projection (7)	1973 projection (8)	Difference (7) - (8) (9)			
BOTH SEXES												
Total, 16 years and over	101,673 24,266 62,497 14,910	99,809 22,582 61,146 16,081	1,864 1,684 1,351 -1,171	108,602 23,067 70,616 14,919	105,716 20,985 68,404 16,327	2,886 2,082 2,212 1,408	113,839 20,952 78,567 14,320	110,576 19,120 75,623 15,833	3,263 1,832 2,944 -1,513			
MEN												
Total, 16 years and over	60,000 12,974 37,861 9,165	60,630 12,347 38,498 9,785	-630 627 -637 -620	62,903 11,976 41,922 9,005	64,057 11,285 42,977 9,795	-1,154 691 -1,055 -790	65,220 10,647 46,017 8,556	66,947 10,132 47,376 9,439	-1,727 515 -1,359 -883			

2,494 1,057

1.988

45,699

11.091 28.694

Table 4. Comparison of current labor force projection with 1973 BLS projection, 1980, 1985, and 1990

41,673 11,292 39,179

WOMEN

16 to 24 years. 25 to 54 years. 55 years and over

Total, 16 years and over. .

1,317 4,303

43,629

8,988 28,247

Deris F. Johnston, "The U.S. labor force: projections to 1990, "Monthly Labor Review, July 1973, pp. 3-13.

projection line. Second, the current method for making the projection does not reduce the rate of change in the rate as rapidly as did the previous methodology. In the previous set of projections there was an implicit assumption that the rate of growth of the female participation rate would eventually drop to zero and that most of the movement toward zero would occur in the late 1970's. Although the current projections are also built on the assumption that the rate of change will eventually drop to zero, we have postulated that no significant movement toward zero would occur before the mid-1980's, with most taking place during the early 1990's, after the period of the projection.

This change in assumptions reflects a change in the perception of the determinants of female labor force growth. During the late 1960's and early 1970's, as the birth rate was decreasing drastically, most of the increase in the female labor force participation rate was attributed to this factor. And since it was then assumed that the birth rate could not decrease much further—an assumption which has been met—it was expected that the spectacular growth in the labor force rate of young adult women would have to come to a quick end. In fact, the rise continued.

It is now evident that mothers of young children are increasingly likely to be in the labor force. Thus, even though the birth rate is no longer decreasing as rapidly as before, labor force participation for young women has continued to increase as strongly as in the late 1960's. Given these factors, it is difficult to project much of a decrease in the rate of growth in female labor force participation for the late 1970's.

Although the greatest difference between these projections and the previous ones is in the increased number of women in the labor force, there are some other significant changes. The projections for men of prime working age and for older men have been lowered, resulting in a labor force that is 1.3 million lower in 1980 and 2.2 million lower in 1990 than the 1973 projections. Evidence since 1972 indicates an intensification of the decline in the labor force participation of adult men.

Another large difference is in terms of the labor force for male teenagers. After decreasing over the late 1950's and early 1960's, the labor force rates for this group have since reversed and are now on the upturn; the change is most apparent for youths age 16-17. Thus, in contrast to the earlier projection, labor force participation of teenagers is projected to increase. As a consequence, the male youth labor force (age 16-24) is expected to be about 625,000 higher in 1980 than previously pro-

jected. Because of the dynamics of the baby boom, the large difference in the projections for this group is for 1985, a year for which the current projections is 700,000 larger than the previous one. Since the female labor force in this age group is also projected to be higher, the current projection implies a generally, younger labor force than the previous projections.

Another significant departure from past projections is in terms of the participation rates for older women, which are generally expected to be lower than had been previously projected. As a consequence, the labor force of women age 55 and over is now projected to be 630,000 smaller in 1990 than previously projected.

The net effect of all the changes from the projection published in 1973 is to increase the civilian labor force by 1.9 million in 1980, by 2.9 million in 1985, and by 3.3 million in 1990.

#### Methods and assumptions

The labor force projections presented in this article are derived essentially from two sets of data: (1) data on the anticipated size and age-sex composition of the population of working age, made available by the Bureau of the Census, and (2) data on projected trends in labor force participation among the various age-sex groups in the population, which we obtained by extrapolating the observed long-term trends in the participation rates of each of these groups.

In terms of the projections of the size and age-sex composition of the population, it should be noted that the data used here cover only a 15-year period (1975-90) and are limited to persons 16 years of age and over. Thus, even the projections for 1990 are limited entirely to persons who are already born and who can be counted. The future size of the 1975 population can be projected fairly accurately by allowing for the effects of mortality and immigration. The future course of the birth rate, which is much more difficult—if not impossible—to accurately, has only a secondary effect on the abor force projections because persons born during the projections period will not have reached labor force age by 1990. Thus, except for possible changes in mortality rates and in the net effect of immigration and emigration, there is not a large element of uncertainty with regard to these population estimates.

However, the element of uncertainty surrounding the projections of the labor force participation rates of the various population groups is much greater. In making these projections, several assumptions had to be made, the most important of which are: that there will be no drastic departure from previous trends in the propensity of the various popula-

tion groups to seek work; that the general demand situation will follow the basic trends of the post-World War II era; that there will be no major wars or great social disturbances; that legislation will not alter the conditions under which individuals choose to enter or remain out of the labor force; and finally, that there will be no substantial changes in prevailing definitions of "labor force," "employment," and "unemployment."

As already noted, the general approach used in projecting the participation rates was to extrapolate the observed long-term trend for each age-sex group. The extrapolation line was generally determined by means of a linear regression, but exceptions had to be made for some age-sex groups whose participation rates have changed trend during the recent past, as well as for those groups for whom extrapolation yielded results that seemed highly improbable. In these few cases, it was decided to either alter the rate of change judgmentally or to hold the participation rates constant. Finally, on the assumption that participation rates can neither rise nor decline forever because they must be constrained between zero and 100 percent, their rate of change was made to diminish gradually so as to reach zero in 20 years. However, as already noted and as described in detail later in this article, the new "tapering" method introduced with this round of projections does not significantly reduce the rates of change during the first 10 years of the projection period.

The projections discussed above were calculated in the same way for women as for men, that is, by dividing their population into 5-year age groups and by then extrapolating the participation rates of each age group from data for the 1955-75 period. In so doing, it is implicitly assumed that the participation rates of women of childbearing and childrearing age will follow the basic trends which they have exhibited over this 20-year period, a period in which their rates have risen considerably.

Before adopting this method, serious consideration was given to the possibility of constructing the projections for women of childbearing and childrearing age by first subdividing their population into two groups: those who, on the basis of Bureau of the Census fertility projections, might be expected to have children under age 6, and those who are not expected to have any pre-school children and thus be less hindered in any attempt to join the labor force. However, annual data by 5-year groups for these women are available only since 1970. Only through a significant amount of interpolation could it be created for prior years, and then only as far back as the mid-1960's.

After considering various options, it was decided that a more reliable set of projections for women could be constructed from the historical data for the 1955-75 period, even though it is not possible through such data to divide the female population by presence or absence of children. However, as discussed below, two alternative projections of the female labor force, which are based on differing assumptions about the future course of their fertility, were made on the basis of the shorter historical series (1964-75). These fertility assumptions are, respectively, considerably higher and lower than the "middle of the road" assumption implicit in the main body of projections.

The procedure used to construct the main projections was as follows:

- Step 1. Annual average rates of labor force participation (the percent of the total population in the total labor force, including Armed Forces) were obtained for each year, 1955 through 1975, for men and women separately in the following age groups: 16-17, 18-19, and 5-year age groups thereafter to 70 and over.
- Step 2. The average annual rate of change in the participation rates of each age-sex group over the 1955-75 period was estimated by means of linear regression. Using the estimated annual rates of change, projections of the labor force were made for each year from 1975 to 1990, inclusive.
- Step 3. Each annual rate of change was gradually reduced so that by 1995, all changes would be zero. In Order to have a smooth path that would be approximately exponential, the rate of change was made to have constant second differences. To accomplish this, the formula for sum of the integers from 1 to n was used (the sum is n(n+1)/2). Since the rates of change are being tapered to zero over a 20year period, the value of n in this case was 20, and each annual rate of change was divided by 210, yielding a second term,  $d_{2}$ . The change then was decreased algebraically by multiplying the formula i(i+1)/2, where i was the number of years since 1975 times d 2; that is the change from 1980 to 1981 was the estimated rate less 15  $\times$   $d_2$ . The projected labor force participation rate for a given year is thus the algebraic sum of the gradually reduced rate of change and the participation rate for the previous year. As a take-off point for the projection, the average of the labor force rates for 1973-75 was used. Example: if the annual rate of change for a given group was estimated to be 2.1 percentage points a year, and the take-off point was 30 percent, then  $d_2$  would be 0.01. The pro-

Table 5. Effect of alternative fertility assumptions on projected civilian labor force of women 20 to 44 years old, by age, 1980, 1985, and 1990

		1980			1985						
Sei end ago group	Alternetive A	Main projection	Alternetive B	Alternetive A	Main projection	Alternative B	Alternative A	Main projection	Alternative B		
<b>MANAG</b>	ं €								114500		
Total, 16 years and over	101,094	103.673	102,191	. 107,669	108,602	109,301	112,760	113,839	114,593		
Total, 16 years and over	60,000	60,000	60,000	62,903	62,903	62,903	65,220	65,220	65,220		
WOMEN Total, 16 years and over	41,094	41,673	42,191	44,766	45,699	46,398	47,540	48,619	49,373		
16 to 19 years 20 to 24 years 25 to 54 years	41,094 4,226 6,859 24,264	4,226 7,066 24,636	4,226 7,212 25,008	3,762 7,116 27,974	3,762 7,329 28,694	3,762 7,477 29,245	3,649 6,482 31,645	3,649 6,656 32,550	3,649 6,775 33,185		
25 to 34 years 35 to 44 years 45 to 54 years	{ 10.049	41,673 4,226 7,066 24,636 10,394 7,633 6,609 5,745	10,736 , 7,663 – 6,609	11,549 9,664 6,761	12,210 9,723 6,761	12,704 9,780 6,761	12,257 11,593 7,795	13,077 11,678 7,795	13,631 11,759 7,795		
55 years and over	5,745	5,745	5,745	5,914	5,914	6,761 5,914	5,764	5,764	5,76		

The Alternative A projection is based on Bureau of the Census projected birth rates for Series I, Alarnative B on projected birth rates for Series III. As currently defined by the Bureau of the Census in Current Population Reports, Series P-25, No. 601, Series I implies an ultimate fertility rate of 2,700, that is, 1,000 women would have, on average, 2,700 births

throughout their childbearing period. Series II implies a corresponding rate of 2,100 and Series III implies a rate of 1,700. The basic discussion of projections in this report is of the projections for Series II.

jected rate for 1975 would be 32.10 percent, and for 1976 it would be 34.19 percent. Because of the very low values of  $d_2$  for the initial years of the projection period, this projection remains nearly linear from 1975 to to 1990. By 1990, this projection would be below the linear projections and after 1995 it would be constant.

Step 4. The projected labor force rate for each agesex group was then multiplied by the corresponding population component in the Bureau of the Census projections, and the results were then aggregated, yielding the total labor force, including the Armed Forces.

To produce estimates of the civilian labor Step 5. force and of the civilian labor force participation rates, two more operations are necessary: removal from the total population of that portion which is confined to institutions, yielding a noninstitutional population, and the further removal, both from the population data and from the estimates of the total labor force, of the Armed Forces yielding a civilian noninstitutional population on one hand, and a civilian labor force on the other. Civilian labor force participation rates are then obtained by dividing the civilian labor force by the civilian noninstitutional population. In arriving at the estimates of the noninstitutional population, it was assumed that persons confined to institutions will continue to account for the same proportion of the total population in each age-sex group as in 1970.

The number of persons in the Armed Forces is projected to be 2,088,000 each year of the projec-

tion, with 1,990,000 men and 98,000 women. The distribution by age within each sex was assumed to be that of July 1974.8

#### Alternative projections of the labor force

As already noted, the projections discussed earlier and shown in tables 1 through 4 were made without taking into explicit account the possible impact on the participation rate of women of various possible future paths of their fertility. Historical annual data on which to base such projections was readily available with sufficient age detail only from 1970 on, and could be constructed through interpolation beginning with the mid-1960's, a much shorter time period than that covered by the data for all women. However, the data for the shorter time span were ultimately used in producing two alternative projections of the labor force which would take into account the possible impact on the participation rate of women of two different fertility paths. One alternative or B, is built on the assumption of a further drop in fertility, as embodied in the so-called Series III population projections of the Bureau of the Census, and the other, or A, is premised on a fairly rapid rebound in fertility, as embodied in the Bureau of the Census' Series I projections. The "main" projections, on the other hand, are based on the assumption of a "middle" course in fertility patterns, along the lines of the Bureau of the Census Series II projections of the population.9 For 1990, for example, it is assumed under Series I that women will, on the average, have 2.7 children; under Series II they would have 2.1 children; and under Series III they would have 1.7 children.

The following process was followed in making the alternative A and B projections. First, the projected female population in each 5-year age group from 20 to 44 was subdivided into two separate categories according to the presence or absence of preschool children. This was done separately for each of the Bureau of the Census projected fertility paths, that is for Series I, II, and III. 10

The second step was to obtain participation rates for these groups which, when applied to Series II, would be consistent with those implicit in the main projections. This process, which had only a very small impact on aggregate labor force levels (the net impact on the 1990 totals being only on the order of 150,000), was carried out as follows: (1) participation rates for women with and without children in each age group were extrapolated from the observed trends for the 1970-75 period; (2) these rates were then applied to the separate Series II population levels for women with and women without children to obtain their labor force levels: (3) these labor force levels were then aggregated to a female total for each 5-year age group; (4) the percent difference between these aggregations and the numbers for the same age groups in the "main" projections was then used to adjust (increase or decrease) the separate labor force levels for women with and without children; (5) these adjusted labor force levels were then divided by the Series II projected population of women with and without children, yielding "adjusted" participation rates for these groups which are consistent with those in the main projections. These adjusted rates were then multiplied by the different population levels for women with and without young children embodied in Series I and Series III census projections, yielding new labor force levels.

The labor force projections for women age 20 to 44 under the main projection and the two alternate. projections are shown in table 5. As shown, should the fertility of U.S. women follow the lower course, (alternative B) rather than that implicit in the main projection, the labor force would have 518,000 more workers in 1980, and more than 750,000 in 1990. The increase would be concentrated among women 25 to 34 years of age. Not only would the number of women in the labor force increase under this assumption, but the reduced interruptions in their labor force careers would imply less loss of skills while not working and would yield a more productive and better paid labor force. The alternative A labor force projection, which is based on the higher fertility assumption, would result in a lower labor force projection, since more women would have interrupted careers, or longer interruptions, or both. Thus, the alternative A labor force would be 580,000 smaller in 1980 and 1.1 million smaller in 1990 than is the case with the main projection.

----FOOTNOTES-

'The "baby boom cohort" is defined as those persons born from the late 1940's to the early 1960's, a period which encompasses the peak year of births, 1961.

Moreover, the official unemployment rate should be more similar to Perry's weighted unemployment rate because of the larger proportion of the labor force composed of prime age workers. See George L. Perry, "Changing Labor Markets and Inflation," Brookings Papers on Economic Activity, 1970: 3, pp. 411-41.

There is no standard definition of the "economic dependency" ratio. In this case, it is defined as all persons not in the labor force (including all those less than 16 years old) divided by the total in the labor force. See Henry S. Shryock, Jacob S. Siegel, and others, The Methods and Materials of Demography (Bureau of the Census, 1973), p. 235.

For a recent exposition of the concept that the baby boom cohorts will experience difficulties at each stage of their life cycle, see Denis F. Johnston, "The Aging of the Baby Boom Cohorts," Statistical Reporter, March 1976, pp. 161-65.

For further discussion of recent trends in female labor force participation, see three articles on the labor force in the November 1975 Monthly Labor Review Allyson Sherman Grossman, "Women in the labor force: the early years," pp. 3-9; Deborah Pisetzner Klein, "Women in the labor force: the middle years," pp. 10-16; Beverly Johnson McEaddy, "Women in the labor force: the later years," pp. 17-24.

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<sup>6</sup> For discussion of the decline in men's labor force participation rates and related topics, see Paul O. Flaim, "Discouraged workers and changes in employment," *Monthly Labor Review*, March 1973, pp. 8-16; Robert L. Stein, "Reasons for Nonparticipation in the Labor Force," *Monthly Labor Review*, July 1967, pp. 22-27; Joseph L. Gastwirth, "On the decline of male labor force participation," *Monthly Labor Review*, November 1973, pp. 53-54; and William V. Deutermann, Jr., "Declining Labor Force Participation of Prime Age Men," (Bureau of Labor Statistics, 1976), unpublished.

<sup>7</sup> Jacob S. Siegel, Demographic Aspects of Aging and the Older Population in the United States, Current Population Reports: Special Studies: Series P-23, No. 59 (Bureau of the Census, 1976).

- \* Current Population Reports, Series P-25, No. 529.
- \* Current Population Reports, Series P-25, No. 601, table A-5.

<sup>10</sup> Detailed information on the process used to subdivide the female population in line with these fertility assumptions may be obtained from the authors upon request.

#### Appendix

This report contains, in addition to the article from the December 1976 issue of the Monthly Labor Review, the following material:

Page

#### Supplementary table:

15

### Noninstitutional population, total labor force, and labor force participation rates by age and sex, actual 1970 and projected 1980, 1985, and 1990

[ Numbers in thousands)

Age and sex			noninstu ulation,		· · · · · · · · · · · · · · · · · · ·	Total	labor fo	rce, annu	al overag	144	Labor force participation rate							
	Art	ual	<del> </del>	Projected	<del></del>	Act	ual		Projected	<del></del>	Act	uel	Pr	oject	e d			
BOTE SEXES	1970	1975	1980	1985	1990	1970	1975	1980	1985	1990	1970	1975	1980	1985	1990			
							,											
Total, 16 *		153,574	165, 286	173,986	181,053	85,902	94,798		110,686	115,925								
16 - 24 25 - 54	32,246 71,182	35,752 76,943	37,295 83,852	34,576 92,641	31,265 102,037	19,916	23,488 57,142	25,453 63,396	24,254 71,515	22,139 79,466			63.2 75.6					
55 and over	37,566	40,878	44, 139	46,569	47,751	14,500	14,168	14,910	14,919	14,320			33.8					
en de compresentado de la compresentada del compresentada de la compresentada de la co	*			-											ļ			
Total, 16 *	67,685	73,564	79,077	65,107	86,367	54,343	57,712	61,988	64,891	67,208	80.3	78.5	78.4	78.1	77.8			
16 - 24	16,238 7,671	17,974 8,416	16,734 8,371	17,373 7,204	15,731 6,819	11,773 4,395	13,313 5,127	14,091	13,093	11,764	72.5	74.1	75.2 62.6	75.4	74.8			
16 - 17	3,910	4,237	4,109	3,538	3,200	1,840	2,077	2,096	4,515	1,647	47.0	49.0	51.0	51.2	51.3			
18 - 19	3,760	4,179	4,262	3,666	3,611	2,555	3,050	3,143	2,703	2,663	67.9	73.0	73.7	73.7	73.7			
20:= 24 25:= 54	8,566 34,689	9,557 37,581	10,367	10,169	8,912 50,017	7.378 33.279	8,186 35,507	8,852 38,732	8,578 42,793	7,454	57.3 47.0 67.9 86.1 95.9 96.8	85.7	85.4 04.3	84 .4	83.6			
25 - 34	12,370	15,172	17,752	19,553	20,146	11,974	14,460	16,925	18,577	19,101	96.8	95.3	95.3	95.0	94.8			
25 - 29	6,731	8,330	9,307	10,103	9,907	6,509	7,881	8,787	9,499	9,287	7441	7740	77.4	****	7-4 - 1			
30 = 34	5,639	6.842	8,445 12,425	9,450 15,195	10,239	5,465 10,818	6,579 10,583	6,138	9,078	9,814	96.9	96.2	96.4	96.1	95.8			
35 - 39	5,406	5,618	6,795	6,383	9,358	5,259	5,414	6,538	8,041	8,956	97.3	96.4	96.2	95.9	95.7			
40 = 44	5,779	5,421 11,368	5,630 10,878	6,812	8,391	5,559	5,169	5,340	6,429	7,893			94.8					
45 = 49	11,132 5,612	5,668	5,321	10,758 5,530	12,122 6,685	10,487 5,577	10,464	9,929 4,963	9,746	10,938			91.3					
50 - 54	5,320	5,699	5,557	5,228	5,437	4,910	5,135	4,966	4,622	4,772	92.3	90.1	89.4	88.4	87,8			
55 and over 55 - 64	16,758	18,009 9,224	19,284	10,000	20,619 9,592	9,291	8,892 6,985	9,165	9,005	8,556			47.5					
55 - 59	4,721		5,313	5,194	4,888	7,127 4,221	4,187	7,275	7,162 4,283	6,704 3,990	89.4	84.3	74.3	82.5	81.6			
60 = 64	3,990	4,259	4,478	4,806	4,704	2,906	2,798	2,827	2,879	2,714	72.8	65.7	63.1	59.9	57.7			
65 - 69	8,047 3,061	8,784 3,497	9,493 3,734	10,228	11.027 4,236	2,164 1,278	1,907	1,890	1,843	1,852	26.9	21.7	19.9	18.0	16.8			
70 ****	A,986	5,287	5,759	6,286	6.791	886	1,108 799	765	739	1,125 727	17.8							
WOMEN		`																
Total, 16 *	73,310	80.009	86,209	90,879	94,685	31,559	37,086	<b>∆1</b> ,771	45 707	48,717								
16 - 24	16,008	17,778	18,557	17,203	15,534	8,143	10,175	11,362	45,797 11,161	10,375	43.0	57. 2	61.2	64.9	66.8			
16 - 19	7,494	8,245	8,180	7,038	6,632	3,250	4,059	4,246	3,782	3,669	43.4	49.2	51.9	53 . 7	55,3			
16 - 17 18 - 19	3,796	4,113 4,131	3,972 4,208	3,420	3,089	1,324	1,652 2,407	1.712 2.534	1,551	1,448 2,221	34,9	40.2	43.1	45.4	46.9			
20 - 24	8,513	9,533	10,377	10,165	8,902	4,893	6,116	7,116	7,379	6,706	57.5	64.2	68.6	72.6	75.3			
25 - 54	36,494	39,361	42,757	47,335	52,020	18,207	21,635	24,664	28,722	32,578	49.9	55.0	57.6	60.7	62.6			
25 - 34 25 - 29	12,730 6,885	15,531 8,480	18,131 9,480	19,990	20,605	5,704   3,118	8,473 4,838	10,417 5,728	12,233	13,100	44.8	54.6	57.5	61 . 2	63.6			
. 30 - 34	5,845	7,051	8,651	9,680	10,508	2.586	3,635	4,689	5,566	6,276	44.2							
35 - 44	11,774	11,621	13,089	15,908	18,530	5,970	6,495	7,638	9,728	11,683	50.7	55.9	58.4	61.2	63.0			
35 - 39 40 - 44	5,656 6,118	5,929 5,691	7,129 5,960	6,740 7,168	9,755 8,775	2,759 3,211	3,256 3,239	4,137 3,501	5,343 4,385	6,170 5,513	46.8 52.5	56.9	58.0	61.1	63 . 2 62 . A			
45 - 54	11,988	12,207	11,577	11,437	12,885	6,533	6,667	6,609	6,761	7,795	54.5	54,6	57.1	59.1	60.5			
45 - 49	6,240	6,028	5,607	5,876	7,059	3,453	3,372	3,229	3,491	4,282	55.3	55.9	57.6	59.4	60.7			
50 - 54 55 and over	5,747 20,807	6,179	5,970 24,855	5,561 26,341	5,826 27,132	3,080 5,209	3,295 5,276	3,380 5,745	3,270 5,914	3,513 5.764	53.6							
55 - 64	9,757	10,349	11,035	11,238	10,671	4,153	4,244	4,628	4,740	4,514	42.6	41.0	41.9	42.2	42.3			
55 - 54	5,160	5,470	5,881	5,689	5,299	2,547	2,618	2,891	2,870	2,703	49.2	47.9	49.2	50.4	51.0			
60 - 64	11,050	4,878	5,154 13,820	5,549 15,103	5,372	1,606	1.626	1,737	1,870	1,811	35.1 9.6		33.7					
65 - 69	3,914	4,432	4,748	5,028	5,419	644	640	692	721	768	16.9	14.4	14.6	14.3	14.2			
70 ****	7,236	8,087	9,072	10,075	11,042	412	392	425	453	482	5.7	4.8	4.7	4.5	4.4			



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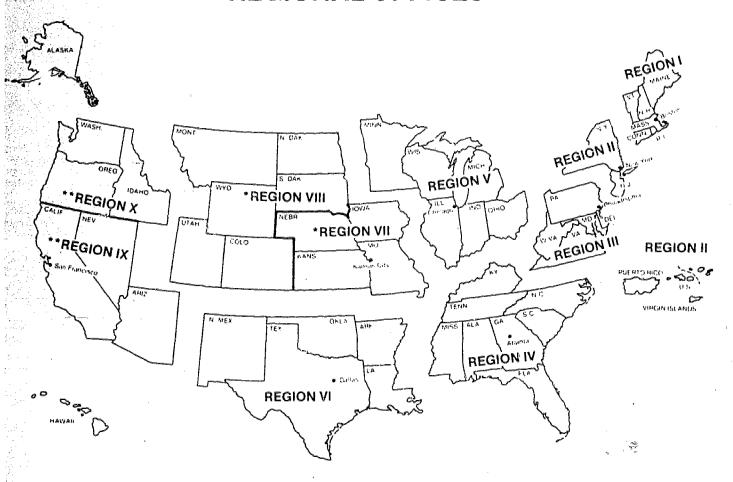


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